Philip Bretz

Curriculum Vitae

PERSONAL DETAILS

Birth	August, 1995
Website	`www.math.ou.edu/~pbretz`
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PERSONAL STATEMENT

I am an ambitious, self-taught student. I taught myself multiple coding languages, the theory of financial derivatives, and much of statistics and probability. My work experience and higher education in mathematics provided a basis of knowledge which I continue to build on through hard work.

EDUCATION

PhD. Mathematics 2017-present

University of Oklahoma

I am researching financial quantitative analysis, probability, and stochastic calculus.

BSc. Mathematics 2013-2017

University of Oklahoma

I graduated with honors with a focus in applied mathematics. For my honors research I taught myself Matlab and constructed a finite element method numerical solver for variations on convection-diffusion equations.

WORK EXPERIENCE

Math Center Supervisor 2019-present

University of Oklahoma

I supervise various sections of the university's math center, from advanced calculus to linear algebra and differential equations. This requires a solid grasp of all these mathematical topics.

Instructor 2015-present

University of Oklahoma

I teach undergraduate courses and work at the university's math center. I have taught all levels of calculus and pre-calculus. For advanced calculus, I developed my own curriculum, with a focus on application. I regularly receive excellent tutor and instructor reviews.

Research Assistant 2017

University of Oklahoma Health Sciences Center

I assisted Dr. Barbara Norton with a PCORI (Patient-Centered Outcomes Research Institute) grant project. I performed various tasks: literature review, editing and revision of quantitative analyses, and participating in community meetings.

Intern 2014

Commander, U.S. Pacific Fleet

I assisted in naval warfare readiness assessment, attended Unified Engagement 2014 (wargame workshop), and prepared a brief for the Commander focused on implementing an innovation program.

INTERESTS AND SKILLS

Interests	Applied Mathematics
	Machine Learning
	Financial Stochastic Processes
	Modeling Financial Derivatives
Coding	MATLAB, LaTeX, R, C++, HTML, CSS
Assets	SECRET security clearance, through 2022
Skills	Self-taught all coding languages
	Statistics
	Probability
	Stochastic Calculus

REFERENCES

Available upon request